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(FILE 'HOME' ENTERED AT 15:23:28 ON 13 AUG 2007)

FILE 'BIOSIS, CAPLUS, EMBASE, MEDLINE, JAPIO' ENTERED AT 15:23:46 ON 13  
AUG 2007

L1 1924 S (ANTI CD4 ANTIBOD?)  
L2 839 S (ANTI CD40 ANTIBOD?)  
L3 3 S L1 AND L2  
L4 3 DUPLICATE REMOVE L3 (0 DUPLICATES REMOVED)  
L5 0 S (CDLOCD40HI)  
L6 6661 S CD4 AND CD40  
L7 2554 S L6 AND ANTIBOD?  
L8 1638 S L7 AND PD<2004  
L9 876 DUPLICATE REMOVE L8 (762 DUPLICATES REMOVED)  
L10 34 S L9 AND DIABETES?  
L11 1 S L9 AND EMPHYSEMA?  
L12 803 DUPLICATE REMOVE L1 (1121 DUPLICATES REMOVED)  
L13 661 S L12 AND PD<2004  
L14 7 S L9 AND L1  
L15 25 S L9 AND L2

L15 ANSWER 11 OF 25 BIOSIS COPYRIGHT (c) 2007 The Thomson Corporation on  
 STN  
 AN 2000:432374 BIOSIS  
 DN PREV200000432374  
 TI Increased expression of CD40 ligand in activated CD4+  
 T lymphocytes of systemic sclerosis patients.  
 AU Valentini, Gabriele [Reprint author]; Romano, Maria Fiammetta; Naclerio,  
 Caterina; Bisogni, Rita; Lamberti, Annalisa; Turco, Maria Caterina;  
 Venuta, Salvatore  
 CS Istituto di Clinica Medica e Reumatologia, II Universita di Napoli, Via  
 Pansini, 5, 80131, Napoli, Italy  
 SO Journal of Autoimmunity, (August, 2000) Vol. 15, No. 1, pp.  
 61-66. print.  
 ISSN: 0896-8411.  
 DT Article  
 LA English  
 ED Entered STN: 11 Oct 2000  
 Last Updated on STN: 10 Jan 2002  
 AB CD40-CD154 interactions play a key role in regulating immune  
 response and are involved in the development of some autoimmune diseases.  
 We analysed the expression of CD154 antigen in CD3-activated PBMC from 10  
 systemic sclerosis (SSc) patients and 10 control subjects by  
 immunofluorescence. PBMC from SSc patients showed an increased expression  
 of this molecule, since, 6 h following CD3 stimulation, the percentage of  
 CD154+ cells was of 17.53+-2.0 (mean+-SE) in control and 25.33+-2.93 in  
 patient cells (P<0.03). The higher expression of CD154 antigen was  
 ascribable to CD4+ cells. The enhanced induction of CD154  
 following CD3 stimulation depended on protein synthesis, since was  
 abolished when the cells were stimulated via CD3 in the presence of  
 cycloheximide. By analysing the expression of the CD40-induced  
 antigen CD80, we verified that a blocking anti-CD40  
 antibody inhibited CD80 appearance in SSc activated monocytes,  
 indicating that CD154 molecule was functional. These results show an  
 enhanced expression of a functional CD154 molecule in SSc CD4+  
 activated T lymphocytes.  
 CC Cytology - Human 02508  
 Cytology - Animal 02506  
 Biochemistry studies - General 10060  
 Biochemistry studies - Proteins, peptides and amino acids 10064  
 Blood - Blood and lymph studies 15002  
 Blood - Blood cell studies 15004  
 Bones, joints, fasciae, connective and adipose tissue - Pathology 18006  
 Immunology - General and methods 34502  
 Immunology - Immunopathology, tissue immunology 34508  
 IT Major Concepts  
 Biochemistry and Molecular Biophysics; Clinical Immunology (Human  
 Medicine, Medical Sciences)  
 IT Parts, Structures, & Systems of Organisms  
 CD154-positive cells: blood and lymphatics, immune system; CD4  
 -positive T lymphocytes: blood and lymphatics, immune system; PBMC:  
 blood and lymphatics, immune system, CD3-activated  
 IT Diseases  
 systemic sclerosis: connective tissue disease  
 Sclerosis (MeSH)  
 IT Chemicals & Biochemicals  
 CD154: expression, functionality; CD3; CD80: CD40-induced  
 antigen, expression; anti-CD40 antibody;  
 cycloheximide: protein synthesis inhibitor; protein: synthesis  
 ORGN Classifier  
 Hominidae 86215  
 Super Taxa  
 Primates; Mammalia; Vertebrata; Chordata; Animalia  
 Organism Name

human: patient

Taxa Notes

Animals, Chordates, Humans, Mammals, Primates, Vertebrates

RN 66-81-9 (cycloheximide)

AN 1995:438519 BIOSIS

DN PREV199598452819

TI Characteristics of antigen-independent and antigen-dependent interaction of dendritic cells with CD4+ T cells.

AU Hauss, Pascale; Selz, Françoise; Cavazzana-Calvo, Marina; Fischer, Alain [Reprint author]

CS INSERM U429, Hop. Necker-Enfants Malades, 149 rue de Sevres, F-75743 Paris Cedex 15, France

SO European Journal of Immunology, (1995) Vol. 25, No. 8, pp. 2285-2294.

CODEN: EJIMAF. ISSN: 0014-2980.

DT Article

LA English

ED Entered STN: 10 Oct 1995

Last Updated on STN: 10 Oct 1995

AB Dendritic cells (DC) are the main antigen-presenting cells for the initiation of primary T cell-mediated immune responses. In the first stage of activation, T cells bind to DC in an antigen-independent manner. We studied the adhesion characteristics of human CD4+ T cells to DC generated from CD34+ hematopoietic progenitors following 12 to 13 days of culture in the presence of granulocyte/macrophage colony-stimulating factor and tumor necrosis factor-alpha. A majority of these cells had the morphology, phenotype and functions of DC. CD4+ T/DC adhesion was measured by means of fluorescence microscopy and flow cytometry. Four independent receptor/ligand pathways, LFA-1/ICAM, ICAM/LFA-1, CD2/LFA-3 and CD28/CD80, were involved in the transient adhesion of DC to CD4+ T cells in antigen-independent and specific alloantigen-dependent situations, as shown by blocking experiments using monoclonal antibodies. The antibodies also blocked a primary mixed lymphocyte reaction (MLR) in which DC were used as stimulatory cells. Adhesion of alloreactive CD4+ T cells to antigen-presenting DC was stronger than that of resting CD4+ T cells; while peak adhesion occurred after 5 and 20 min, respectively. The LFA-1 ligands involved in adhesion of resting CD4 T cells to DC and alloreactive CD4+ T-cells to specific DC differed in part, since ICAM-3 on resting T cells and ICAM-1 on alloreactive T lymphocytes preferentially bound LFA-1. Studies of interactions between DC and phorbol ester-activated T cells expressing the CD40 ligand revealed a fifth independent adhesion pathway, CD40/CD40 ligand. CD4-mediated regulation of CD4+ T/DC adhesion was suggested by the observation that preincubation of CD4+ T cells and DC individually with anti-CD4 antibodies inhibited adhesion. In addition, antibodies specific for HLA class II molecules inhibited adhesion when used to pretreat DC but not alloactivated CD4+ T cells.

CC Cytology - Human 02508

Genetics - Human 03508

Biochemistry methods - Proteins, peptides and amino acids 10054

Biochemistry methods - Carbohydrates 10058

Biochemistry studies - Proteins, peptides and amino acids 10064

Biochemistry studies - Carbohydrates 10068

Biophysics - Methods and techniques 10504

Biophysics - Molecular properties and macromolecules 10506

Biophysics - Membrane phenomena 10508

Blood - Blood cell studies 15004

Blood - Lymphatic tissue and reticuloendothelial system 15008

Bones, joints, fasciae, connective and adipose tissue - Anatomy 18002

Integumentary system - Anatomy 18502

Development and Embryology - Morphogenesis 25508

In vitro cellular and subcellular studies 32600

Immunology - Immunopathology, tissue immunology 34508

IT Major Concepts

Biochemistry and Molecular Biophysics; Blood and Lymphatics (Transport

AN 1995:438519 BIOSIS

DN PREV199598452819

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Integumentary system - Anatomy 18502

Development and Embryology - Morphogenesis 25508

In vitro cellular and subcellular studies 32600

Immunology - Immunopathology, tissue immunology 34508

IT Major Concepts

Biochemistry and Molecular Biophysics; Blood and Lymphatics (Transport

and Circulation); Cell Biology; Clinical Endocrinology (Human Medicine,  
Medical Sciences); Development; Genetics; Integumentary System  
(Chemical Coordination and Homeostasis); Membranes (Cell Biology);  
Skeletal System (Movement and Support)

IT Miscellaneous Descriptors

ADHESION MOLECULES; ANTIGEN-PRESENTING CELL; T-HELPER CELL

ORGN Classifier

Hominidae 86215

Super Taxa

Primates; Mammalia; Vertebrata; Chordata; Animalia

Organism Name

human

Taxa Notes

Animals, Chordates, Humans, Mammals, Primates, Vertebrates

and Circulation); Cell Biology; Clinical Endocrinology (Human Medicine,  
Medical Sciences); Development; Genetics; Integumentary System  
(Chemical Coordination and Homeostasis); Membranes (Cell Biology);  
Skeletal System (Movement and Support)

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Primates; Mammalia; Vertebrata; Chordata; Animalia

Organism Name

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Taxa Notes

Animals, Chordates, Humans, Mammals, Primates, Vertebrates

AN 1996:54899 CAPLUS

DN 124:114965

ED Entered STN: 26 Jan 1996

TI B cell-B cell interaction through intercellular adhesion molecule-1 and lymphocyte functional antigen-1 regulates immunoglobulin E synthesis by B cells stimulated with interleukin-4 and anti-CD40 antibody

AU Katada, Yoshinori; Tanaka, Toshio; Ochi, Hiroshi; Aitani, Masakazu; Yokota, Akira; Kikutani, Hitoshi; Suemura, Masaki; Kishimoto, Tadimitsu

CS Department Medicine III, Osaka University Medical School, Osaka, Japan

SO European Journal of Immunology (1996), 26(1), 192-200

CODEN: EJIMAF; ISSN: 0014-2980

PB VCH

DT Journal

LA English

CC 15-3 (Immunochemistry)

AB IgE synthesis by purified human B cells is induced by two signals: a class switching factor, most commonly interleukin (IL)-4, and the engagement of CD40, which is activated through its interaction with CD40

ligand (CD40L) expressed on activated T cells. Thus, the combination of IL-4 and anti-CD40 monoclonal antibody (mAb) has been

shown to stimulate IgE production in vitro by highly purified B cells. In this T cell-independent system, strong homotypic aggregation of B cells is observed prior to the production of IgE. Flow cytometric anal. and cell

binding

assays showed that the stimulation of purified B cells with anti-CD40 mAb plus IL-4 resulted in a striking increase of intercellular adhesion mol. (ICAM)-1(CD54) expression, an induction of CD43 and an avidity change of lymphocyte functional antigen (LFA)-1(CD11a/CD18), with little augmentation of CD18 expression. Addition of anti-ICAM-1 mAb caused an inhibition of homotypic aggregation but augmented IgE synthesis by B cells stimulated with anti-CD40 mAb and IL-4, although it did not affect B cell proliferation or IL-6 production by the B cells. Among the mAb against counter-receptors for ICAM-1 tested, anti-CD11a mAb suppressed IgE synthesis, while anti-CD18 mAb and anti-CD43 mAb had little effect. The enhancing or inhibitory effect of anti-ICAM-1 mAb or anti-CD11a mAb on IgE production was achieved by the increased or decreased expression of germline C $\epsilon$  transcripts by B cells stimulated with anti-CD4 mAb and IL-4. These results indicate that B cell-B cell interaction through ICAM-1 and one of its counter receptors, LFA-1, regulates IgE synthesis by modulating C $\epsilon$  germ-line transcription.

ST B cell IgE formation interleukin CD40; ICAM 1 LFA 1 IgE formation

IT Transcription, genetic

(B cell interaction through ICAM-1 and LFA-1 regulates IgE synthesis stimulated with interleukin-4 and anti-CD40 antibody)

IT Lymphocyte

(B-cell, B cell interaction through ICAM-1 and LFA-1 regulates IgE synthesis stimulated with interleukin-4 and anti-CD40 antibody)

IT Antigens

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); BIOL (Biological study)

(CD40, B cell interaction through ICAM-1 and LFA-1 regulates IgE synthesis stimulated with interleukin-4 and anti-CD40 antibody)

IT Immunoglobulins

RL: BSU (Biological study, unclassified); MFM (Metabolic formation); BIOL (Biological study); FORM (Formation, nonpreparative)

(E, B cell interaction through ICAM-1 and LFA-1 regulates IgE synthesis stimulated with interleukin-4 and anti-CD40)



AN 1996:54899 CAPLUS

DN 124:114965

ED Entered STN: 26 Jan 1996

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shown to stimulate IgE production in vitro by highly purified B cells. In this T cell-independent system, strong homotypic aggregation of B cells is observed prior to the production of IgE. Flow cytometric anal. and cell binding

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ST B cell IgE formation interleukin CD40; ICAM 1 LFA 1 IgE formation

IT Transcription, genetic

(B cell interaction through ICAM-1 and LFA-1 regulates IgE synthesis stimulated with interleukin-4 and anti-CD40 antibody)

IT Lymphocyte

(B-cell, B cell interaction through ICAM-1 and LFA-1 regulates IgE synthesis stimulated with interleukin-4 and anti-CD40 antibody)

IT Antigens

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); BIOL (Biological study)

(CD40, B cell interaction through ICAM-1 and LFA-1 regulates IgE synthesis stimulated with interleukin-4 and anti-CD40 antibody)

IT Immunoglobulins

RL: BSU (Biological study, unclassified); MFM (Metabolic formation); BIOL (Biological study); FORM (Formation, nonpreparative)

(E, B cell interaction through ICAM-1 and LFA-1 regulates IgE synthesis stimulated with interleukin-4 and anti-CD40)

- antibody)
- IT Glycoproteins, specific or class  
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); BIOL (Biological study)  
(ICAM-1 (intercellular adhesion mol. 1), B cell interaction through ICAM-1 and LFA-1 regulates IgE synthesis stimulated with interleukin-4 and anti-CD40 antibody)
- IT Integrins  
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); BIOL (Biological study)  
(antigens LFA-1, B cell interaction through ICAM-1 and LFA-1 regulates IgE synthesis stimulated with interleukin-4 and anti-CD40 antibody)
- IT Lymphokines and Cytokines  
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); BIOL (Biological study)  
(interleukin 4, B cell interaction through ICAM-1 and LFA-1 regulates IgE synthesis stimulated with interleukin-4 and anti-CD40 antibody)
- IT Sialoglycoproteins  
RL: BSU (Biological study, unclassified); MFM (Metabolic formation); BIOL (Biological study); FORM (Formation, nonpreparative)  
(leukosialins, B cell interaction through ICAM-1 and LFA-1 regulates IgE synthesis stimulated with interleukin-4 and anti-CD40 antibody)

antibody)

IT Glycoproteins, specific or class

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); BIOL (Biological study)

(ICAM-1 (intercellular adhesion mol. 1), B cell interaction through ICAM-1 and LFA-1 regulates IgE synthesis stimulated with interleukin-4 and anti-CD40 antibody)

IT Integrins

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); BIOL (Biological study)

(antigens LFA-1, B cell interaction through ICAM-1 and LFA-1 regulates IgE synthesis stimulated with interleukin-4 and anti-CD40 antibody)

IT Lymphokines and Cytokines

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); BIOL (Biological study)

(interleukin 4, B cell interaction through ICAM-1 and LFA-1 regulates IgE synthesis stimulated with interleukin-4 and anti-CD40 antibody)

IT Sialoglycoproteins

RL: BSU (Biological study, unclassified); MFM (Metabolic formation); BIOL (Biological study); FORM (Formation, nonpreparative)

(leukosialins, B cell interaction through ICAM-1 and LFA-1 regulates IgE synthesis stimulated with interleukin-4 and anti-CD40 antibody)

AN 1998:566926 CAPLUS

DN 129:314876

ED Entered STN: 07 Sep 1998

TI Surface expression and release of soluble forms of CD8 and CD23 in CD40- and IL-4-activated mononuclear cells from patients with Graves' disease (GD)

AU Itoh, M.; Uchimura, K.; Hayakawa, N.; Makino, M.; Hayashi, R.; Nagata, M.; Kakizawa, H.; Nagasaka, A.; Sakamoto, H.; Kuzuya, H.

CS Department of Internal Medicine, School of Medicine, Fujita Health University, Aichi, 470-1192, Japan

SO Clinical and Experimental Immunology (1998), 113(2), 309-314

CODEN: CEXIAL; ISSN: 0009-9104

PB Blackwell Science Ltd.

DT Journal

LA English

CC 15-8 (Immunochemistry)

AB The authors investigated the effect of T cell-dependent B cell activation on the surface expression and release of the soluble forms of CD8 and CD23 by peripheral blood mononuclear cells (PBMC) obtained from patients with GD vs. patients with Hashimoto's thyroiditis, and normal controls. Incubating the PBMC with anti-CD40 MoAbs and IL-4 increased the soluble CD23 levels in cells from all three groups. An increase in the number of CD23+ cells was observed in the PBMC from the patients with GD but not in PBMC from Hashimoto's thyroiditis or controls. Less soluble CD8 was released from anti-CD40 antibody and IL-4-stimulated PBMC obtained from patients with GD relative to those from the controls. In addition, the number of CD8+ cells was significantly reduced in stimulated PBMC from the GD patients relative to those from controls. Incubation of PBMC with anti-CD40 antibody plus IL-4 did not affect the proportions of CD4+, CD20+, Fas+CD4+, and Fas+CD8+ cells. The addition of T3 to cultured PBMC from controls did not reproduce the changes in CD23+ and CD8+ cells noted in the samples from GD patients. Thus, T cell-dependent B cell activation, mediated by a CD40 pathway, may reduce the number of CD8+ cells, causing exacerbation of GD.

ST CD8 CD40 interleukin 4 Graves disease; CD23 CD40 interleukin 4 Graves disease

IT Cell activation

(B cell; soluble CD8 and CD23 expression in CD40- and IL-4-activated mononuclear cells from humans with Graves' disease)

IT Immunoglobulin receptors

RL: BOC (Biological occurrence); BSU (Biological study, unclassified); BIOL (Biological study); OCCU (Occurrence)

(IgE type II, soluble; soluble CD8 and CD23 expression in CD40- and IL-4-activated mononuclear cells from humans with Graves' disease)

IT B cell (lymphocyte)

(activation; soluble CD8 and CD23 expression in CD40- and IL-4-activated mononuclear cells from humans with Graves' disease)

IT Graves' disease

T cell (lymphocyte)

(soluble CD8 and CD23 expression in CD40- and IL-4-activated mononuclear cells from humans with Graves' disease)

IT CD40 (antigen)

Interleukin 4

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); BIOL (Biological study)

(soluble CD8 and CD23 expression in CD40- and IL-4-activated mononuclear cells from humans with Graves' disease)

IT CD8 (antigen)

RL: BOC (Biological occurrence); BSU (Biological study, unclassified); BIOL (Biological study); OCCU (Occurrence)

(soluble; soluble CD8 and CD23 expression in CD40- and IL-4-activated mononuclear cells from humans with Graves' disease)

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ST CD8 CD40 interleukin 4 Graves disease; CD23 CD40 interleukin 4 Graves disease

IT Cell activation

(B cell; soluble CD8 and CD23 expression in CD40- and IL-4-activated mononuclear cells from humans with Graves' disease)

IT Immunoglobulin receptors

RL: BOC (Biological occurrence); BSU (Biological study, unclassified);

BIOL (Biological study); OCCU (Occurrence)

(IgE type II, soluble; soluble CD8 and CD23 expression in CD40- and IL-4-activated mononuclear cells from humans with Graves' disease)

IT B cell (lymphocyte)

(activation; soluble CD8 and CD23 expression in CD40- and IL-4-activated mononuclear cells from humans with Graves' disease)

IT Graves' disease

T cell (lymphocyte)

(soluble CD8 and CD23 expression in CD40- and IL-4-activated mononuclear cells from humans with Graves' disease)

IT CD40 (antigen)

Interleukin 4

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); BIOL (Biological study)

(soluble CD8 and CD23 expression in CD40- and IL-4-activated mononuclear cells from humans with Graves' disease)

IT CD8 (antigen)

RL: BOC (Biological occurrence); BSU (Biological study, unclassified);

BIOL (Biological study); OCCU (Occurrence)

(soluble; soluble CD8 and CD23 expression in CD40- and IL-4-activated mononuclear cells from humans with Graves' disease)

RE.CNT 38      THERE ARE 38 CITED REFERENCES AVAILABLE FOR THIS RECORD  
RE

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- (37) Weetman, A; Endocr Rev 1984, V5, P309 MEDLINE
- (38) Werner, S; N Engl J Med 1972, V287, P421 MEDLINE

AN 1994:178029 BIOSIS  
DN PREV199497191029  
TI Activated CD4+ T cells induce CD40-dependent proliferation of human B cell precursors.  
AU Renard, Nathalie [Reprint author]; Duvert, Valerie; Blanchard, Dominique; Banchereau, Jacques; Saeland, Sem  
CS Schering-Plough, Lab. Immunological Res., 27 chemin des Peupliers, 69571 Dardilly, France  
SO Journal of Immunology, (1994) Vol. 152, No. 4, pp. 1693-1701.  
CODEN: JOIMA3. ISSN: 0022-1767.  
DT Article  
LA English  
ED Entered STN: 26 Apr 1994  
Last Updated on STN: 26 Apr 1994  
AB Anti-CD3-activated human CD4+ T cell clones were found to induce proliferation of CD10+, CD19+, surface(s) Ig-B cell precursors (BCP) isolated from human fetal bone marrow. The great majority of the B lineage cells recovered in cocultures of BCP and activated T cells displayed a BCP phenotype (Ig- or cytoplasmic mu+ and K/lambda-), including most of the cycling cells, indicating that the cultures do not favor a transition to mature B cells. Supernatants of activated T cells were ineffective in inducing BCP proliferation, indicating the necessity of close association with stimulator cells. In line with this finding, the CD40 molecule was found to represent an important component of the cocultures, as BCP proliferation was strongly inhibited by soluble anti-CD40 antibody. In addition, CD4+ T cell clones from a hyper-IgM patient expressing a truncated CD40 ligand (CD40-L) failed to induce BCP proliferation. Finally, a combination of cytokines (IL-2, IL-3, IL-7, and IL-10) enhanced the observed T cell-dependent BCP proliferation, but could not substitute for the deficient CD40-L. Taken together, our data demonstrate that CD4+ T cells exert a stimulatory effect on in vitro B human lymphopoiesis via the CD40 pathway. The present results suggest that T cells may play an important role in regulating B cell ontogeny in the bone marrow.  
CC Microscopy - Cytology and cytochemistry 01054  
Cytology - Human 02508  
Genetics - Human 03508  
Radiation biology - Radiation and isotope techniques 06504  
Biochemistry studies - Proteins, peptides and amino acids 10064  
Biochemistry studies - Carbohydrates 10068  
Biophysics - Molecular properties and macromolecules 10506  
Biophysics - Membrane phenomena 10508  
Blood - Blood cell studies 15004  
Blood - Lymphatic tissue and reticuloendothelial system 15008  
Bones, joints, fasciae, connective and adipose tissue - General and methods 18001  
Bones, joints, fasciae, connective and adipose tissue - Anatomy 18002  
Development and Embryology - Morphogenesis 25508  
In vitro cellular and subcellular studies 32600  
Immunology - General and methods 34502  
Immunology - Immunopathology, tissue immunology 34508  
IT Major Concepts  
Biochemistry and Molecular Biophysics; Blood and Lymphatics (Transport and Circulation); Cell Biology; Clinical Endocrinology (Human Medicine, Medical Sciences); Development; Genetics; Immune System (Chemical Coordination and Homeostasis); Membranes (Cell Biology); Skeletal System (Movement and Support)  
IT Miscellaneous Descriptors  
B-CELL ONTOGENY; B-LYMPHOPOIESIS; BONE MARROW; CYTOFLUOROMETRY  
ORGN Classifier  
Hominidae 86215



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AN 1994:178029 BIOSIS  
DN PREV199497191029  
TI Activated CD4+ T cells induce CD40-dependent  
proliferation of human B cell precursors.  
AU Renard, Nathalie [Reprint author]; Duvert, Valerie; Blanchard, Dominique;  
Banchereau, Jacques; Saeland, Sem  
CS Schering-Plough, Lab. Immunological Res., 27 chemin des Peupliers, 69571  
Dardilly, France  
SO Journal of Immunology, (1994) Vol. 152, No. 4, pp. 1693-1701.  
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Finally, a combination of cytokines (IL-2, IL-3, IL-7, and IL-10) enhanced  
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In vitro cellular and subcellular studies 32600  
Immunology - General and methods 34502  
Immunology - Immunopathology, tissue immunology 34508

IT Major Concepts  
Biochemistry and Molecular Biophysics; Blood and Lymphatics (Transport  
and Circulation); Cell Biology; Clinical Endocrinology (Human Medicine,  
Medical Sciences); Development; Genetics; Immune System (Chemical  
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System (Movement and Support)

IT Miscellaneous Descriptors  
B-CELL ONTOGENY; B-LYMPHOPOIESIS; BONE MARROW; CYTOFLUOROMETRY

ORGN Classifier  
Hominidae 86215

Super Taxa

Primates; Mammalia; Vertebrata; Chordata; Animalia

Organism Name

Hominidae

Taxa Notes

Animals, Chordates, Humans, Mammals, Primates, Vertebrates

Super Taxa

Primates; Mammalia; Vertebrata; Chordata; Animalia

Organism Name

Hominidae

Taxa Notes

Animals, Chordates, Humans, Mammals, Primates, Vertebrates

L15 ANSWER 11 OF 25 BIOSIS COPYRIGHT (c) 2007 The Thomson Corporation on  
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AN 2000:432374 BIOSIS

DN PREV200000432374

TI Increased expression of CD40 ligand in activated CD4+  
T lymphocytes of systemic sclerosis patients.

AU Valentini, Gabriele [Reprint author]; Romano, Maria Fiammetta; Naclerio,  
Caterina; Bisogni, Rita; Lamberti, Annalisa; Turco, Maria Caterina;  
Venuta, Salvatore

CS Istituto di Clinica Medica e Reumatologia, II Universita di Napoli, Via  
Pansini, 5, 80131, Napoli, Italy

SO Journal of Autoimmunity, (August, 2000) Vol. 15, No. 1, pp.  
61-66. print.  
ISSN: 0896-8411.

DT Article

LA English

ED Entered STN: 11 Oct 2000  
Last Updated on STN: 10 Jan 2002

AB CD40-CD154 interactions play a key role in regulating immune  
response and are involved in the development of some autoimmune diseases.  
We analysed the expression of CD154 antigen in CD3-activated PBMC from 10  
systemic sclerosis (SSc) patients and 10 control subjects by  
immunofluorescence. PBMC from SSc patients showed an increased expression  
of this molecule, since, 6 h following CD3 stimulation, the percentage of  
CD154+ cells was of 17.53+-2.0 (mean+-SE) in control and 25.33+-2.93 in  
patient cells (P<0.03). The higher expression of CD154 antigen was  
ascribable to CD4+ cells. The enhanced induction of CD154  
following CD3 stimulation depended on protein synthesis, since was  
abolished when the cells were stimulated via CD3 in the presence of  
cycloheximide. By analysing the expression of the CD40-induced  
antigen CD80, we verified that a blocking anti-CD40  
antibody inhibited CD80 appearance in SSc activated monocytes,  
indicating that CD154 molecule was functional. These results show an  
enhanced expression of a functional CD154 molecule in SSc CD4+  
activated T lymphocytes.

CC Cytology - Human 02508  
Cytology - Animal 02506  
Biochemistry studies - General 10060  
Biochemistry studies - Proteins, peptides and amino acids 10064  
Blood - Blood and lymph studies 15002  
Blood - Blood cell studies 15004  
Bones, joints, fasciae, connective and adipose tissue - Pathology 18006  
Immunology - General and methods 34502  
Immunology - Immunopathology, tissue immunology 34508

IT Major Concepts  
Biochemistry and Molecular Biophysics; Clinical Immunology (Human  
Medicine, Medical Sciences)

IT Parts, Structures, & Systems of Organisms  
CD154-positive cells: blood and lymphatics, immune system; CD4  
-positive T lymphocytes: blood and lymphatics, immune system; PBMC:  
blood and lymphatics, immune system, CD3-activated

IT Diseases  
systemic sclerosis: connective tissue disease  
Sclerosis (MeSH)

IT Chemicals & Biochemicals  
CD154: expression, functionality; CD3; CD80: CD40-induced  
antigen, expression; anti-CD40 antibody;  
cycloheximide: protein synthesis inhibitor; protein: synthesis

ORGN Classifier  
Hominidae 86215  
Super Taxa  
Primates; Mammalia; Vertebrata; Chordata; Animalia  
Organism Name

human: patient

Taxa Notes

Animals, Chordates, Humans, Mammals, Primates, Vertebrates

RN 66-81-9 (cycloheximide)

d his

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FILE 'BIOSIS, CAPLUS, EMBASE, MEDLINE, JAPPIO' ENTERED AT 15:23:46 ON 13  
AUG 2007

L1 1924 S (ANTI CD4 ANTIBOD?)  
L2 839 S (ANTI CD40 ANTIBOD?)  
L3 3 S L1 AND L2  
L4 3 DUPLICATE REMOVE L3 (0 DUPLICATES REMOVED)  
L5 0 S (CDLOCD40HI)  
L6 6661 S CD4 AND CD40  
L7 2554 S L6 AND ANTIBOD?  
L8 1638 S L7 AND PD<2004  
L9 876 DUPLICATE REMOVE L8 (762 DUPLICATES REMOVED)  
L10 34 S L9 AND DIABETES?  
L11 1 S L9 AND EMPHYSEMA?  
L12 803 DUPLICATE REMOVE L1 (1121 DUPLICATES REMOVED)  
L13 661 S L12 AND PD<2004  
L14 7 S L9 AND L1  
L15 25 S L9 AND L2

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Time: 11:36:10 PALM INTRANET

# Biotech Query for 10/563570

Title: **METHODS FOR PREDICTING DEVELOPMENT OF AUTO-IMMUNE DISEASES AND TREATMENT OF SAME**

Inventor: **WAGNER, DAVID**

Location:

Location Date:

Group Art Unit: **1641**

Status: **71/RESPONSE TO NON-FINAL OFFICE ACTION ENTERED AND FORWARDED TO EXAMINER**

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